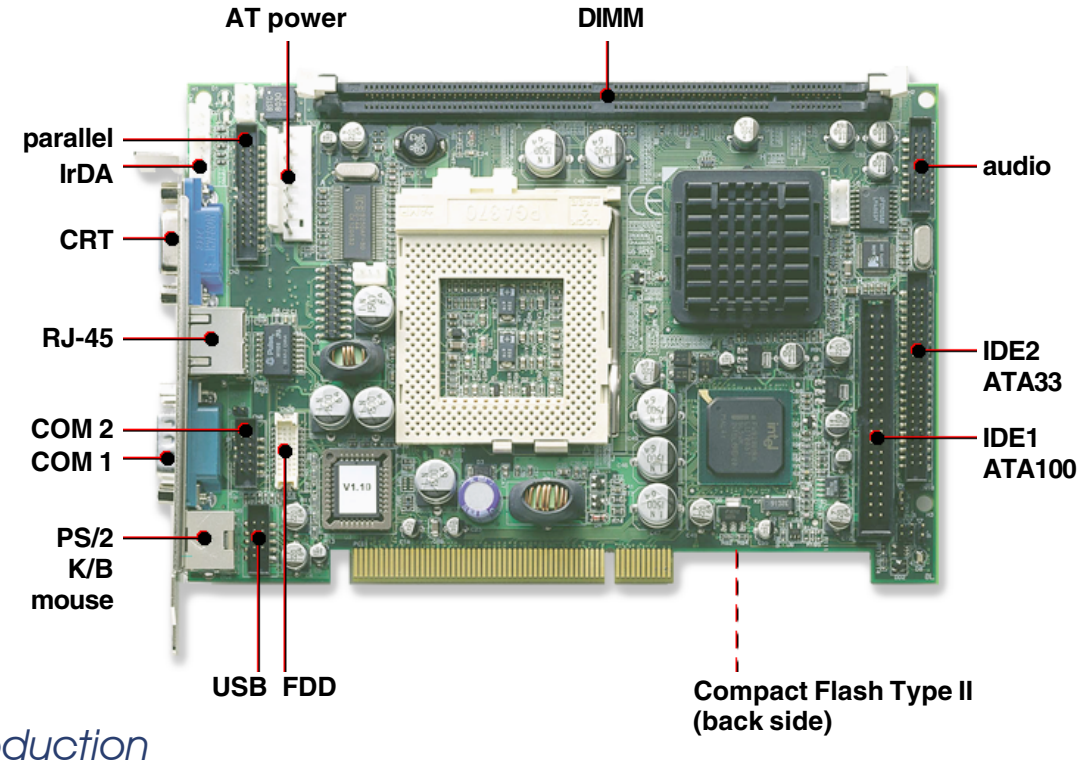
PCI-6870

Socket 370 PIII/Celeron PCI™ Half-size CPU Card with VGA/LAN/CFC



Introduction

The High Speed PCI Bus

The PCI-6870 is Advantech's latest effort to provide new PCI based solutions to their customers. This SBC is based solely on the PCI bus standard.

The advantage of using the PCI bus standard is the higher performance of 32-bits at 33 MHz compared to the ISA buses' standard 8/16-bits at 8 MHz. This increased performance makes PCI cards especially attractive for communication applications. PCI bus cards also provide for easy expansion. For example, adding another Ethernet port could easily be done on a PCI bus card. Also, other high-speed add-on cards need a PCI interface. High speed Add-on communication cards are good examples of this.

Socket 370 Flexibility

The PCI-6870 supports both 0.13 micron and 0.18 micron socket 370 Pentium III/Celeron processors. It supports 100/133 system bus. Using Intel 815E chipset, it can support a Pentium III/Celeron CPU up to 1.24/1.2 GHz. PCI-6870 uses the VGA controller in the 815E chipset and supports Direct AGP. The VGA memory is UMA shared memory and can be further upgraded to 4MB with an optional module. There are 2 serial ports, one RS-232 and one RS-232/422/485. The PCI-6870's USB interface is USB rev.1.1 compliant. There is a 10/100 Mbps Ethernet interface as well as SIR IrDA compliant infrared support. The PCI IDE interface has two IDE channels and supports 4 IDE devices with Ultra DMA33 with Bus Mastering up to 33MB/sec. In addition, Channel one IDE supports ultra DMA 33/66/100.

Features

- Supports Socket 370 for Intel® Pentium III/Celeron™ processor processor up to 1.26/1.2 GHz
- High speed Direct AGP for VGA display (815E built-in) with an optional video module supporting DVI, and TV out
- 10/100Base-T Fast Ethernet (IntelR 815E built-in and Intel 82562ET onboard)
- USB interface compliant with USB rev. 1.1
- CompactFlash Type II card
- System overheat temperature control
- Watchdog timer, jumperless on-line setup supported
- Supports wake-up on LAN
- Supports PCI interface compliant with PCI rev. 2.1
- Supports four* PCI Bus masters

* up to six PCI Bus masters with special backplane

CE

PCI-6870

Specifications

- **CPU**: Socket 370 for Intel® Pentium III/Celeron™ processor up to 1.26/1.2 GHz
- **BIOS**: 2 Mbit Flash BIOS, supports Plug & Play, APM 1.2
  Supports Ethernet Boot ROM
  Supports boot from CD-ROM
  Supports boot from LS-120 ZIP™ Drive
  Optional customer icon
- **Chipset**: Intel® 815E PCI set, FSB 100/133 MHz
- **2nd level cache**: 128/256KB on Celeron/Pentium III™ Processor
- **System memory**: One DIMM socket, supports PC100/133 up to 512MB
- **PCI IDE interface**: Two Enhanced IDE interfaces, supporting 4 IDE devices Ultra DMA33 with bus mastering up to 33 MB/sec. Channel one supports Ultra DMA 33/66/100.
- **USB interface:** Two USB ports
- **Floppy disk drive interface**: Supports up to two FDDs (360 KB/1.2 MB/720 KB/1.44 MB/2.88 MB)
- **Parallel port**: One parallel port, supports EPP/ECP
- **IR port**: One 115 kbps IrDA compliant serial infrared
- **Serial ports**: 2 serial ports
  COM1: RS-232, COM2: RS-232/422/485
- **Audio:** AC97 compliant, Mic in, Line in, Line out, Speaker out
- **Watchdog timer**: 62 levels timer interval, setup by software, jumperless selection, generates hardware reset

AGP SVGA/Flat Panel Interface

- **Chipset**: Intel 815E (Direct AGP)
- **Display memory**: Share system memory up to 4MB (max.)
- **Display type**: Supports CRT
- **Interface**: 2x AGP, Accelerator Graphics Ports 1.0 compliant
- **Display mode**:

  CRT display supports up to 800 x 600 @ 24 bpp, 1024 x 768 @ 24 bpp

Ethernet Interface

- Intel 82562ET chip

  PCI Ethernet controller, IEEE 802.3 protocol compatible
  Supports 10/100 Base-T Ethernet

Power Management

- **Su**pports Advanced Power Management

Solid State Disk

- Support CompactFlash Type II

Keyboard/Mouse connector

- 6-pin Mini-Din header connector for keyboard and PS/2 mouse

On-board Security

- CPU over temperature

Mechanic and Environmental Specifications

- **Standard Mode Power Consumption**
  Typical 5V @ 6.68A (w/ PIII850,256MB)
  Max. 5V @ 8A
- **Operating temperature**: 0 ~ 60° C (32 ~ 140° F)
- **Size**: 185 mm x 122 mm
- **Weight**: 0.26 kg

Packing List

- ☐ **PCI-6870 SBC**
- ☐ **Jumper pack**
- ☐ **Startup manual**
- ☐ **Driver and utility CD**
- ☐ **Warranty card**
- ☐ **1700060202 PS/2 KB & Mouse cable**
- ☐ **1700100250 COM port cable**
- ☐ **1700260250 LPT cable**
- ☐ **1701400452 EIDE cable**
- ☐ **1703080101 Power cable**
- ☐ **1703340400 FDD cable**

Ordering Information

❑PCI-6870F-00A1

PCI bus socket 370 815E half-size CPU card with VGA/LAN/CFC

Optional Accessories

❑PCA-6104P4

4-PCI Slot passive backplane

❑IPC-644P4-80

4-slot IPC chassis & 80 W power supply

❑9689000042

IrDA adapter

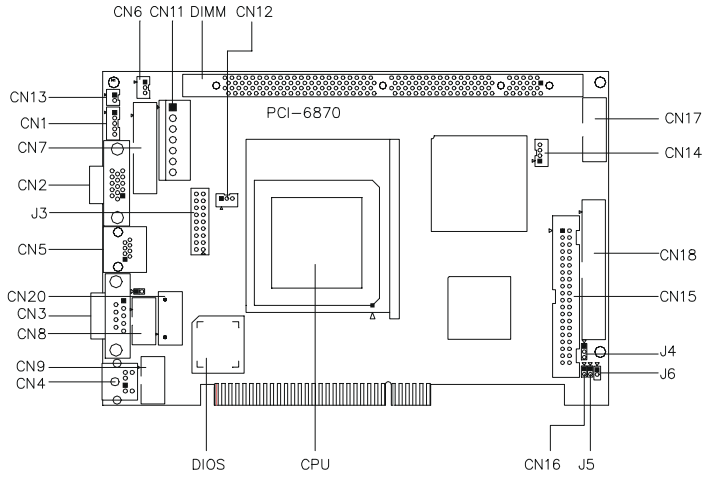
❑1700100170

USB cable

❑1759209100

Fan/heatsink module

Note: All specifications are subject to change without notice
* Pentium is a registered trademark of Intel Corporation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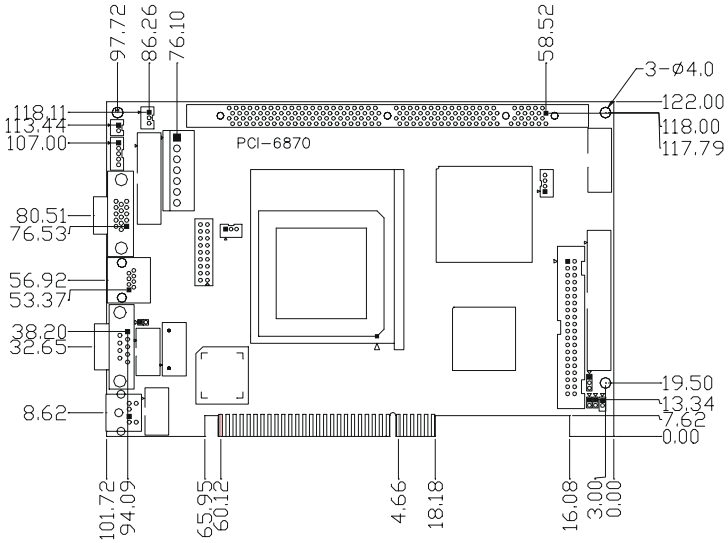
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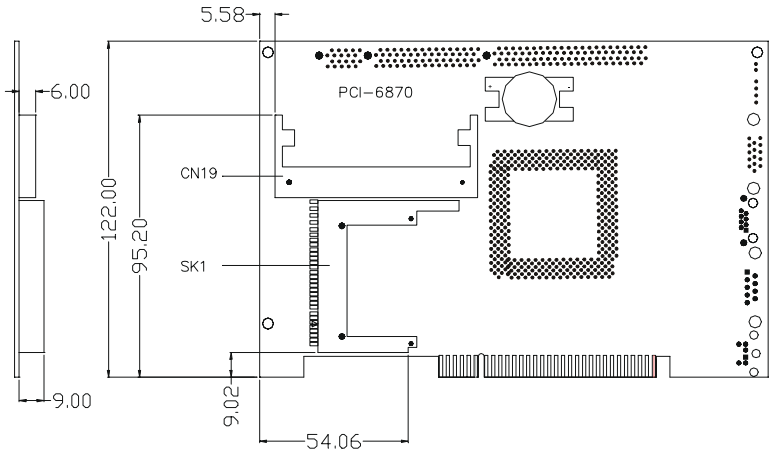
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